

<b>Notice of Allowability</b>	Application No.	Applicant(s) <i>me</i>	
	10/071,880	ECONOMIDES ET AL.	
	Examiner	Art Unit	
	Victor J. Taylor	2863	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8 July 2004.
2. ☒ The allowed claim(s) is/are 13-37.
3. ☒ The drawings filed on 08 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>8</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                        | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's amendment and argument filed 8 June 2004 with respect to the restriction of 24 June 2004 have been fully considered and are persuasive. Group II and claims 13-37 in the restriction have been selected. The restriction of 24 June 2004 is moot.

### **Prior Art**

2. The prior art made of record and not relied upon is considered pertinent to applicant;

I. Art A of Venditto et al., US 5,394,941 in class 166/255 is cited for the well treatment fluids fracture oriented completion tool system for use in a casing string in a wellbore 24 in figure 1 and teaches a plurality of housing communications ports 64 in column 4.

II. Art B of Shuck US 4,005,750 in class 166/308 is cited for the method of selectively orienting induced fractures in subterranean formations using hydraulically induced fractures in figure 5 and teaches fracturing oil bearing sand in line 30 of column 5 and teaches using equations to calculate the conditions in the formation surrounding the borehole in lines 10-65 of column 6.

### ***Allowable Subject Matter***

3. Claims 13-37 are allowed. The applicant withdraws claims 1-12 and 38-61.
4. The following is an examiner's statement of reasons for allowance:

The amendments of record presented with the arguments of record on 8 June 2004 by the applicant in the instant application convinces the examiner that the application is allowable over the cited art of record.

The method in claim 13 to determine the preferred fracture orientation for optimized hydraulic fracture treatments in a wellbore with steps of "providing a stress profile system having a contact stress sensor and locating the contact stress sensor, and measuring the stress contact between a casing and a contact surface disposed about the casing"...[and] with the steps of "performing a hydraulic fracture treatment within the test zone to induce changes in the contact stress"...[and] with the steps of "measuring the changes induced in the contact stress between the casing and the contact surface"...and/or in combination with the steps to "determining the formation stress around the wellbore"...[and with] the steps to determining a preferred hydraulic fracture orientation is not found in the cited art of record.

The prior Art A of Venditto et al., US 5,394,941 teaches the well treatment fluids fracture oriented completion tool system for use in a casing string in a wellbore 24 in figure 1 and teaches the plurality of housing communications ports 64 in column 4.

The prior art B of Shuck US 4,005,750 teaches the method of selectively orienting induced fractures in subterranean formations using hydraulically induced fractures in figure 5 and teaches fracturing oil bearing sand in line 30 of column 5 and teaches using equations to calculate the conditions in the formation surrounding the borehole in lines 10-65 of column 6.

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Therefore, the prior art Venditto et al., and The prior art of Shuck in combination or alone does not teach the present limitation of the claimed combination limitation.

It is these limitations expressed in each of these claims and not found, taught, or suggested in the prior art of record, that makes these claims allowable over the prior art.

Claims 14-37 dependent on the allowed independent claim 13 are allowed at least for the reasons cited above.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor J. Taylor whose telephone number is 571-272-2281. The examiner can normally be reached on 8:00 to 5:30 PM.

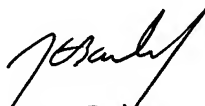
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center at 866-217-9197 (toll-free).

VJT

  
5 August 2004.

  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800